

## REMARKS/ARGUMENTS

Re-examination and favorable reconsideration in light of the following comments are respectfully requested.

Claims 13 and 15 - 25 are pending in the instant application. Currently, all claims stand finally rejected on a first action on the merits.

In the office action mailed March 17, 2008, claims 13 and 15 - 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0172002 to Spira et al.; claims 20 - 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Spira et al. in view of U.S. Patent No. 6,437,692 to Petite et al.; claims 22 and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Spira et al. and Petite et al. in view of U.S. Patent No. 6,553,336 to Johnson; and claims 24 - 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Spira et al. in view of U.S. Patent No. 4,568,909 to Whynacht.

The foregoing rejections are traversed by the instant response.

As can be seen from the foregoing discussion of the rejections in the outstanding office action, all rejections require Spira et al. to be an available reference. The Spira et al. application has a filing date of March 15, 2001. The instant application however has an effective filing date of October 4, 2000 - the filing date of French priority application no. FR 0012675. In order to maintain Spira et al. as an available reference, it must be shown that Spira et al. is entitled to the filing date of provisional patent application 60/190, 170. Further, even if Spira et al. is entitled to the filing date of the provisional application, it must be shown that the subject

matter of the '002 publication being relied upon was disclosed in the provisional patent application in a way which would comply with the first paragraph of 35 U.S.C. 112. The Examiner has not failed to demonstrate either of these critical matters. Applicants believe that the Examiner can not satisfy these burdens for the following reasons.

A review of the application file of provisional patent application 60/190,170 shows that the provisional application was made up of two documents: (1) a provisional application for patent cover sheet to which is attached a nine page document; and (2) 95 pages of technical brochures. A review of these documents shows that the technical content of the provisional patent application does not correspond to the technical content of the published Spira et al. application being relied upon by the Examiner. In fact, they are quite different in content.

The nine page document in the Spira et al. provisional application comprises two pages of extremely brief text relating to a "Method for Providing Maintenance Services." This text comprises six paragraphs. A comparison of the content of these six paragraphs and the content of the later filed Spira et al. US Patent Application reveals the following correspondence.

The second paragraph of the provisional patent application which begins "electronic system plans are employed ..." corresponds partially to the wording of paragraph 0038 of the Spira et al. patent application.

The third paragraph of the provisional patent application which begins "[t]he outsourced maintenance includes ..." corresponds partially to the wording of paragraphs 0040 and 0054 of the Spira et al. application.

The fourth paragraph of the provisional application which begins "[d]ecisions on maintenance services ..." corresponds partially to the wording of paragraph 0041 of the Spira et al. application.

The fifth paragraph of the provisional application which begins "[w]ithin the content of ..." corresponds partially to the wording of paragraph 0042 of the Spira et al. application.

While there is some minor correspondence between the aforementioned portions of the Spira et al. application and the provisional patent application, none of the detailed description used in the later filed Spira et al. application, which is being relied upon by the Examiner, appears to be present in this portion of the provisional patent application.

While there is some correspondence, there are also discrepancies between the two texts. For example, the first paragraph of the provisional application begins "[t]he present invention relates to a modular system of providing technical services." Paragraph 0001 of the published Spira et al. application begins "[t]he present invention relates generally to a management and operation technique ...." Furthermore, the third paragraph of the provisional application begins "[t]he present invention provides outsource maintenance as a part of a business strategy"; whereas, paragraph 0039 of the published Spira et al. application begins "[t]he present invention provides outsourced technical support as part of a business strategy."

The first document in the Spira et al. patent application concludes with 28 claims, the first of which reads as follows:

"A method for providing technical services, comprising the steps of: providing a first level of technical services plan; providing a second level of a technical services plan; and providing a third level of a technical services plan."

None of the 28 claims in this document correspond to the claims of the published Spira et al. application being relied upon by the Examiner.

In this regard, the text of this first document does not contain a description that complies with the requirements of 35 U.S.C. 112, first paragraph. It would not enable one of ordinary skill in the art to make and use the method of providing maintenance services that is the subject of the published Spira et al. application. The document is nothing more than a brief summary of the history of various electronic management systems.

The second portion of the Spira et al. provisional patent application comprises brochures, an overview of the brochures, and a print out of slides of a PowerPoint presentation. Numerous pages are in German for which no translation has been provided. Since these pages are not in English, they can not be considered to be part of the provisional application because they do not comply with the English language requirement for a provisional patent application. Thus, the teachings of the second portion of the provisional patent application are limited to the 74 pages which are in English.

There is virtually no correspondence between these 74 pages and what is disclosed and described in the published Spira et al. application. None of the 25 figures in the published Spira et al. application appears on these pages. The text of these 74 pages does not comply with the

requirements of 35 U.S.C. 112, first paragraph. They would not enable one of ordinary skill in the art to make and use the method of providing maintenance services that is the subject of the published Spira et al. application. There also is no support in any of the documents making up the provisional patent application for the main claims of the published Spira et al. application. For example, the first independent claim in the published Spira et al. application relates to customer related technical services for obtaining an optimal financial result of a production plant by continuously applying a series of specific steps. The limitations of this claim can not be found in the documents forming the provisional patent application. Similarly, later independent claims, such as claim 68, are without any support in the provisional application documents.

It does not appear from a study of the documents which together make up provisional patent application 60/190,170 that, at the time of filing this application, Spira et al. were in possession of either the invention described and claimed in the published Spira et al. application or in the claims of the instant application.

There is nothing in the outstanding office action which would confirm that Spira et al.'s provisional patent application would enable either the invention described in the published Spira et al. application which is being relied upon by the Examiner and/or the invention set forth in claim 13. In fact, undue experimentation would be required to arrive at the invention set forth in claim 13 from a reading of the Spira et al. provisional patent application.

The Examiner has taken the position that Spira et al.'s provisional application satisfies the written

description requirement. Applicant disagrees. The function of the written description requirement is to ensure that the inventor had possession, as of the filing date of the application, of the specific subject matter later claimed by him. See *in re Wertheim*, 541 F.2d 257, 262 (CCPA 1976). The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession of the later claimed subject matter at the time of filing of the application, rather than the presence or absence of literal support in the specification for the claim language. See *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983).

The Examiner's analysis falls short of that which is required because the Examiner has not determined that the subject matter of all the claims in the published Spira et al. application were in the inventor's possession at the time that the Spira et al. provisional application was filed. For example, claim 1 of the Spira et al. published patent application calls for customer related technical services for obtaining an optimal financial result of a production plant by continuously applying the steps of: providing a process description; utilizing connected software tools and hardware tools, and consulting an empirical database of experience. Applicant can not find any support for this claim in the subject matter of the provisional patent application. Nowhere is there any description of a process for obtaining an optimal financial result of a production plant by applying the steps set forth in claim 1. Similarly, there is no written description in the provisional patent application which would support claims 2 - 24 and 27 - 50.

With regard to claim 51 in the Spira et al. published patent application, the provisional patent application does not discuss providing a manual of operating principles common to all plants and providing farther information of operating principles common to all plants of a type of plant.

Thus, the provisional patent application in Spira et al. does not have a written description which supports all the claims in the published Spira et al. patent application. For this reason alone, the Spira et al. published patent application is not entitled to the filing date of the provisional Spira et al. application.

With regard to the invention which is being claimed by Applicant, there is no disclosure in the Spira et al. provisional patent application of the claimed local monitoring units, the claimed control means, the claimed first and second computers connected to the local monitoring units, and the claimed storing means. Since this claimed subject matter can not be found in the Spira et al. provisional patent application, it can not be said that Spira et al. was in possession of the subject matter of claim 13, or any of the other claims in this application as of the filing date of the provisional patent application. Thus, Spira et al. provisional patent application would not meet the written description requirement as to the subject matter being claimed by Applicant. Thus, the Examiner is not entitled to rely upon the filing date of the provisional patent application and the Spira et al. published patent application should be removed as a reference.

With respect to the same claims in the Spira et al. published patent application, the Spira et al. provisional

patent application also does not meet enablement or best mode requirements of 35 U.S.C. 112, first paragraph. Spira et al.'s provisional patent application is not sufficiently enabling to one of ordinary skill in the art to make and use the invention set forth in claims 2 - 24 and 27 - 51 without undue experimentation because it provides absolutely no guidance as to how to perform the subject matter of the claims. As for the best mode requirement, Spira et al.'s provisional patent application does not provide any mode for performing the subject matter of claims 2 - 24 and 27 - 51 of the Spira et al. published patent application.

With respect to the subject matter of the claims on appeal, for the reasons discussed above, it can not be said that the subject matter of the claims on appeal is enabled by the Spira et al. provisional patent application. There is absolutely nothing in the Spira et al. provisional patent application which provides any guidance as to how one of ordinary skill in the art could arrive at the claimed subject matter or how to make and use the claimed invention. In Applicant's opinion, significant undue experimentation would have to be performed to arrive at the claimed invention using the disclosure in the Spira et al. provisional patent application. As for the best mode requirement, Spira et al.'s provisional patent application does not set forth any mode for performing the claimed invention. There is no discussion of the claimed local monitoring units, the claimed control means, the claimed first and second computers connected to the local monitoring units, and the claimed storing means.

The disclosure in the Spira et al. provisional patent application is a broad base description of a modular system



for performing maintenance. It lacks the details sufficient to show that Spira et al. possessed the subject matter of each of claims 13 and 15 - 25 and/or had a disclosure which enabled and/or described a best mode for arriving at the subject matter of each of claims 13 and 15 - 25. Therefore, the Examiner is not entitled to rely upon the filing date of the Spira et al. provisional patent application. Since the Examiner is not entitled to rely upon this date, the Spira et al. published patent application is not available as a reference since Applicant has an earlier effective filing date by virtue of his foreign priority. Since Spira et al. is not available as a reference, all of the rejections of record fail and all pending claims on appeal should be allowed.

In conclusion, Applicants have established that Spira et al. is not entitled to the benefit of the filing date of the provisional patent application. The burden has been on the Examiner to demonstrate that the Spira et al. application is entitled to the filing date of the provisional patent application and the Examiner has failed to meet this burden.

In support of the conclusion that Spira et al. is not entitled to the benefit of the filing date of the provisional patent application is the attached declaration of Mr. Pierre Gendraud. Mr. Gendraud's declaration explains the basis for his concurrence with the above conclusion.

Still further, even if Spira et al. were entitled to the filing date of the provisional application, the provisional application does not provide sufficient support to enable one of ordinary skill in the art to make and use the invention which is set forth in claim 13 of the instant

application. Most notably, there is nothing in the provisional patent application that is a description of a system for remotely and automatically controlling, by a facilities management company, maintenance of facilities by a maintenance company with regard to a contract binding the maintenance company to the facilities management company as claimed in the instant application. Specifically, there is nothing in the Spira et al. provisional patent application which teaches or suggests or enables each of a plurality of local monitoring units comprising: means for measuring operation parameters of the associated piece of facilities for detecting an operational state thereof, control means for allowing a maintenance technician to real time notify the start and end time of his maintenance or repair task performed on the associated piece of facilities; means for being connected to a transmission network; and means for transmitting through said transmission network said detected operational state of said associated piece of facilities and said maintenance task start and end time. Since the Examiner has not shown where the Spira et al. provisional patent application teaches or suggests the foregoing limitations of claim 13, the Examiner may not rely upon the filing date of the provisional patent application as the effective filing date of the published Spira et al. application. Since the actual filing date of the published Spira et al. application is later than the effective filing date of the instant application, the French priority filing date, Spira et al. is not available as a reference under 35 U.S.C. 102/103.

The object of the invention set forth in claim 13, as well as in dependent claims 15 - 19, is to make data available about the maintenance or repair tasks performed

by a maintenance company on facilities such as electromechanical facilities (elevators, automatic doors or gates, ventilation systems, HVAC or heating systems), in order to automatically control maintenance and repair of facilities by a maintenance company with regards to the contract binding the maintenance company to the facilities management company.

To this purpose, the claimed invention as set forth in claim 13 includes local monitoring units each being installed in the vicinity of and attached to one respective monitored machine and being provided with control means, independent from the operational state of the monitored machine, for acquiring a start and end time of each maintenance or repair task performed by a maintenance technician on the associated machine. This maintenance information, and other information about the operational status of the associated machine, is transmitted to central computers which store the received information in a central database. The maintenance and operational state information is analyzed by one central computer in order to determine if the maintenance or repair tasks performed by the maintenance technicians satisfies the contractual obligations of the maintenance company.

The system as claimed allows the facilities management company to **automatically and in real time** control the response times for repairing a facility and/or the frequency with which maintenance operations are performed, *which are specified in the maintenance contract*, to insure that the terms of the contract are complied with by the maintenance company. In addition, if the contract provides for specific servicing or restarting time according to

failure type, the claimed system allows automatic and in real time control that these times are respected.

The present invention describes specific means for allowing a facilities management company to automatically and in real time control maintenance of facilities by a maintenance company with regards to the contract binding the maintenance company to the facilities management company. Notably, the operation allowed by the system of the present invention is based on the claimed control means of the local monitoring units for allowing a maintenance technician to real time notify the start and end time of his maintenance or repair task, which control means are independent from the operational state of the associated piece of facilities.

An objective reading of Spira et al. shows that Spira et al. do not teach or suggest the system as set forth in the claims. Spira et al. does not teach or suggest a system comprising local units installed near machines to be monitored and comprising means for performing a diagnostic of the condition of the machine, and transmitting the diagnostic information via a network. The Examiner makes reference to "integrated sensors which are used to collect measurements continuously during operation ...", but does not say where the reference teaches or suggests connecting these sensors to any local monitoring unit which comprises in combination means for measuring operation parameters of the associated piece of facilities, means for being connected to a transmission network, means for transmitting through the transmission network the detected operational state of the associated piece of facilities, and control means for allowing a maintenance technician to real time notify the start and end time of his maintenance task

performed on the associated piece of facilities. One of ordinary skill in the art reading the Spira et al. reference would not find such a local monitoring unit having such a combination of elements.

It is submitted that the Examiner's interpretation of Spira et al. is unduly strained. In fact, the Examiner merely isolates some elements of Spira et al., taking them independently of the context from which they function in the Spira et al. system, and combines them artificially in an effort to meet the limitations of the claims. In other words, the Examiner's rejection is nothing more than an attempted hindsight reconstruction of the claimed invention.

According to the claimed invention, the local monitoring units are designed for allowing a maintenance technician to real time signal the beginning and end of his servicing on the facility, which information is transmitted to the maintenance and manager companies' computers. Spira et al. does not teach or suggest such functionality. In fact, Spira et al. can not implement such a real time transmission. Recognizing this, the Examiner states that there is an implied ability to track the start and end time of the work as well as the repair tasks performed during the maintenance by the repairman. Yet, Spira et al. never says that such an ability exists. As noted by the Examiner, there is no disclosure of any means, much less the claimed means, for allowing a maintenance technician to real-time notify the start and the end time of the maintenance. Since there is no disclosure of such means and since there is no recognition in Spira et al. of real time notification, there is nothing in the cited and applied prior art which would motivate one of ordinary skill in the art to modify

Spira et al. to provide such a capability. For this reason alone, claim 13 is allowable over the cited and applied prior art.

As to the alleged implied ability, the Examiner never provides any technical line of reasoning to show that this ability is necessarily present in Spira et al. and would be recognized by one of ordinary skill in the art as being present. Merely reviewing maintenance action does not imply that there is an ability to review the start and end times and the repair tasks performed automatically and/or in real time. The ability to review can be nothing more than checking time slips which detail the amount of time spent by a technician and the repair tasks performed. Clearly, the maintenance protocol disclosed by Spira et al. does not do what is being claimed.

Concerning the Examiner's use of the disclosure of Spira et al. (paragraph 0022) about the software modules, Applicant maintains that the software modules of Spira et al. are not at all similar to the local monitoring units of the invention.

Indeed, in Spira et al., the software modules are dedicated to allowing a technician to keyboard data about the general operation of the plant. The information thus captured by the technician is moreover not captured in real time but performed in deferred time (a later time). Also, there is no stamping of the arrivals and departures of the technicians, but only a capture of their hourly charges in order to calculate the associated costs.

By contrast, in the present invention, the local monitoring units are automatic devices allowing real time detection of the operating faults of the associated piece of facilities and also real time storage and transmission

of the start and the end time of the maintenance or repair tasks performed by the technician.

Moreover, concerning the claimed local monitoring units associated with each facility to be monitored, the Examiner makes reference to "integrated sensors" cited in Spira et al. (paragraph 0354) to conclude that the claimed local monitoring units are present. Then, the Examiner seems to assert that the local monitoring units of the invention would be nothing than classical sensors, like the sensors effectively disclosed in Spira et al., which are presented as ordinary sensors, classically used to collect measurements continuously during operation. The Examiner misreads the limitations regarding the claimed local monitoring units and ignores what is actually being claimed.

Indeed, the local monitoring units of the invention comprise in combination means for measuring operation parameters of the associated piece of facilities, means for being connected to a transmission network, means for transmitting through the transmission network the detected operational state of the associated piece of facilities, and control means for allowing a maintenance technician to real time notify the start and end time of his maintenance task performed on the associated piece of facilities. This is what can not be found in Spira et al.

Applicant submits that it is inappropriate for the Examiner to try and reduce the claimed local monitoring units of the invention to classical sensors and to merely say that the fundamental and essential functionality of monitoring units of the invention allowing a maintenance technician to real time notify the start and end time of his maintenance or repair task and then allowing a

facilities management company to automatically control maintenance of facilities by a maintenance company with regards to the maintenance contract, is an implicit functionality of Spira et al. As noted herein, Spira et al. never says that such functionality exists in the maintenance services disclosed.

About this and according to the Examiner, Spira et al. merely indicates that *the contract pricing is linked to performance by the maintenance company*. But in fact, the mentioned contract in Spira et al. is more precisely a contract defining maintenance cost objectives, said maintenance being provided to be overall realized for a plant or a set of plants. When Spira talks about contract, it is never described or suggested precise contractual objectives about maintenance like in the present invention, such as:

- an elapsed time between a time when a piece of facilities is detected as malfunctioning and the start time of the repair task,
- a restart time to put a piece of facilities to a normal operational state after the start time of a repair task,
- a number of maintenance tasks, and
- a total duration of the maintenance tasks.

It is precisely the aim of the present invention to provide a system able to automatically control such maintenance objectives explicitly mentioned in the contract binding the maintenance company to the facilities management company. To this aim, the control means allowing a technician to real time notify the start and end time of his maintenance or repair task are essential means to



automatically compare the practical results with the objectives mentioned in the maintenance contract.

Moreover, even if one assumes, as the Examiner, that the maintenance services according to Spira et al. are effectively monitored to insure that the maintenance company is living up to their end of the contract, there is no disclosure in Spira et al. of any means indicating how the maintenance services are concretely monitored, and thus no disclosure concerning the ability to automatically and in real time follow the good execution of the contract binding the maintenance company to the facilities management company.

To the contrary, in the Spira et al. disclosure, it is explicitly suggested about the possibility to monitor the maintenance services with the intervention of a third party to validate the scheduled reviews (see paragraph 0155 cited by the Examiner).

Spira et al. suggests the opposite of the present invention, which claims to the contrary an automatic control of the execution of the maintenance and repair tasks performed by the technicians of the maintenance company on the facilities with regards to their contractual obligations. The intervention of a third party is clearly incompatible with the concept of an automatic control as claimed. The Examiner's argument on this point is inconsistent.

On pages 5 and 6 of the office action, the Examiner states:

"It would have been obvious to one of ordinary skill in the art to implement the ability to monitor start and end times of a maintenance job along with any repair tasks performed in Spira. Spira's maintenance review capability and in particular the ability to monitor the maintenance

actions and duration of work provides an obvious motivation to suggest such functionality would be required and implicit in his embodiments. Furthermore, the ability to track and monitor a technician's work in Spira's maintenance services would enable both customer and the maintenance company to evaluate the performance according to the agreed upon indicators as defined within the contract [0019]."

Applicant submits that the Examiner has not explained why the alleged capability to monitor maintenance actions and duration of work provides motivation to monitor start and end times automatically and in real time. One could equally argue, and Applicant does so argue, that this disclosure teaches away from the claimed invention because the ability to monitor maintenance actions and duration of work enables one, and suggests to one, that the determination of the start time and end time and the tasks performed can be done at some later time and not in real time. The Examiner's position begs the question: "why did Spira et al. not monitor the start and end times of a maintenance job and the repair tasks automatically in real time, if that is what his system suggests or motivates one to do?" The answer to the question is that Spira et al.'s system does not suggest or motivate one to monitor the start and end times of a maintenance job and the repair tasks automatically and in real time. It is submitted that a reference can not motivate one of ordinary skill in the art to perform a missing step, or provide a missing component to a system, when the Examiner admits that the missing step and the missing component are not part of the reference's disclosure.

The rejection fails because the Examiner's has not provided any teaching, suggestion, or motivation from any

source other than the primary reference, or any technical line of reasoning, that would render the claimed subject matter missing from Spira et al. to be obvious.

In conclusion, the Examiner's interpretation of the Spira et al. published patent application is nothing more than an attempted hindsight reconstruction of the claimed invention.

With regard to the rejection of claim 15, the Examiner contends that the functionality to prevent transmissions of malfunctions during an inspection is well known in the art. Yet the Examiner cites no secondary reference to establish this point. Applicant has requested that the Examiner cite a reference teaching or suggesting this functionality and explain why one of ordinary skill in the art would be motivated to provide such functionality to the system of Spira et al. This request has gone unanswered. It is reversible error when an Examiner notices a feature as being old in the art and such is challenged and the Examiner fails to cite the well known thing on which he/she relies. See *Ex parte Nouel*, 158 USPQ 237 (BPAI 1967).

The mere fact that something exists, or may exist, in the prior art is not a sufficient basis to establish a prima facie case of obviousness. Further, the rejection makes reference to Reid's maintenance system; however, the Examiner has cited no reference to any Reid maintenance system. The Examiner has contended that the functionality of claim 15 is met by the on/off switch of a computer. However, it is not clear to Applicant, how the on/off switch of a computer would comprise a local monitoring unit having the claimed preventing means. The Examiner provides no technical explanation as to how this can be. Thus, the

Examiner has failed to make a *prima facie* case of obviousness with respect to claim 15.

With regard to claim 16, the Examiner has not addressed where in Spira et al. one can find first and second computers connected to both a data base collecting all information and the information transmitted by the local monitoring units. Paragraph 0124 does not even contain the word "computer" or "computers." Paragraph 0357 talks about motors 600 being provided with sensors 602 that sense vibrations. This paragraph goes on to say that the motors and sensors are connected to a database 604 within which production data and condition data of the motors 600 is stored. A computer 606 is connected to access the database 604. Applicant submits that this has nothing to do with the subject matter being claimed in claim 16. There is absolutely no disclosure in the cited portions of Spira et al. which would show that Spira et al. has two computers connected to a database collecting all *information relating to the facilities and the maintenance thereof and the information transmitted by the local monitoring units.* The database 604 stores information about the production data and condition data of motors and the sensors 602 do not function as the claimed monitoring units.

With regard to claim 17, thanks to the functionality of the local monitoring units of the invention allowing a maintenance technician to real time notify the start and end time of his maintenance or repair task, in combination with the other claimed features, notably the computer available to the facilities management company, comprising means for receiving and processing the detected operational

state and maintenance task start and end times transmitted by the local monitoring units, it is possible to:

- obtain an evaluation of the number of maintenance operation, and more precisely:
- to automatically calculate and display the number of maintenance operation carried out for each monitored facility during a predetermined period of time,
- to automatically comparing said number to a predetermined number defined in the maintenance contract binding the maintenance company to the managing company, and
- to automatically display a maintenance fault signal and calculate penalties if the number of maintenance operations does not reach the predetermined number at the end of said predetermined period of time.
- obtain an evaluation of duration of time spent on maintenance operations, and more precisely:
- to automatically calculate and display the total duration of maintenance operations carried out for each monitored facility during a predetermined duration of time,
- to automatically compare said total duration to the predetermined duration in the maintenance contract binding the maintenance company to the managing company, and
- to automatically display a maintenance fault signal and calculate penalties if the total duration of maintenance operations does not reach the predetermined duration at the end of said predetermined period of time.

- obtain an evaluation of total time elapses between beginning of malfunction and start of technician's work, and more precisely:
- to automatically calculate and display the elapsed time between the beginning of a monitored facility malfunction and the start of technician's work,
- to automatically compare said elapsed time to the predetermined time defined in the maintenance contract binding the maintenance company to the managing company, and
- to automatically display a fault signal and calculate penalties if said elapsed time exceeds said predetermined time.
- obtain an evaluation of the duration to return facility to its normal operational state, and more precisely:
- to automatically calculate and display the time elapsed between the start of the maintenance task and the return to a normal operational state of a monitored facility,
- to automatically compare said elapsed time to the predetermined time defined in the maintenance contract binding the maintenance company to the managing company, and
- to automatically display a fault signal and calculate penalties if said elapsed time exceeds said predetermined time.

About this set of features, the Examiner states that the means for counting a number of maintenance tasks carried out for each piece of said facilities during a first period of time, for comparing said maintenance task number to a first threshold can be found in paragraph 0139

of Spira et al. The Examiner then goes on to say that one of ordinary skill in the art would have reasonably inferred that the performance indicators refer to the maintenance tasks described through out Spira's disclosure. A review of paragraph 139 shows that it talks about reviewing historical data. However, there is no disclosure of any means for counting a number of maintenance tasks carried out for **each piece** of said facilities during a first period of time, for comparing the maintenance task number to a first threshold, and for displaying a first maintenance fault signal if the maintenance task number does not reach the first threshold at the end of the first time period. There is absolutely no mention in paragraph 139 or in paragraph 0019 of doing what is claimed in this portion of claim 17. The claimed subject matter is not reasonably inferred from the cited portion of Spira et al. Similarly, these portions of Spira et al. do not act as a disclosure or suggestion of the means for computing a total during of the maintenance tasks performed on each piece of the facilities during a second period of time, for comparing the total duration to a second threshold and for displaying the claimed second maintenance fault signal.

There is also no disclosure in Spira et al. of a means for computing an elapsed time between a time when a piece of said facilities is detected as malfunctioning and the start time of a repair task on the piece of facilities, for comparing the elapsed time with a third threshold, and for displaying a third maintenance fault signal when said elapsed time exceeds said third threshold. None of this is disclosed or suggested in paragraphs 0019, 0164 or 0348. All of these paragraphs relate to disclosures which have nothing to do with the claimed subject matter. There is

nothing in these paragraphs of a technical nature which teaches or suggests the claimed means. For example, there is nothing in these paragraphs about displaying a third maintenance fault signal when the elapsed time exceeds a third threshold.

Similarly, there is no disclosure in paragraphs 0019, 139, 140, and 0258 of a means for comparing a restart time to put a piece of the facilities to a normal operation state after the start time of a repair task on the piece of facilities with a fourth threshold and for displaying the fourth maintenance fault signal when the restart time exceeds a fourth threshold.

As for the discussion of about the functionality being obvious, the Examiner does not show how generating key performance indicators could possibly teach or suggest the claimed fault signals. There is nothing in Spira et al. which says what is considered to be the key performance indicators that are used to evaluate the effectiveness of the provided services. Thus, the claimed subject matter is not rendered obvious by the broad and non-specific disclosure being relied upon by the Examiner. What Spira et al. may be motivated to do is a far cry from what is being claimed. As to the display of alarms or fault signals being well known in the art, a reference to unidentified phantom prior art techniques falls far short of the mark. See *Ex parte Stern*, 13 USPQ2d 1379 (BPAI 1987). Even if displaying fault signals were known in the art, the Examiner has not shown anything in the prior art which would teach displaying the specific fault signals being claimed.

Claim 18 is allowable for the same reasons as claim 17. There is no explicit disclosure in Spira et al. of the



claimed subject matter. Using performance indicators to evaluate effectiveness of the maintenance can mean many things. It is not a disclosure of a second computer having means for automatically computing penalties to be applied to the maintenance company if a maintenance fault concerning the exceeding of one of four thresholds has been detected by the second computer.

Claim 19 is allowable for the same reasons as claim 13 as well as on its own accord. There is no disclosure in Spira et al. of setting a pair of thresholds as a function of the facilities and setting a second pair of thresholds as a function of the detected malfunction or type of repair. As for paragraph 137, the word "threshold" does not appear anywhere in the paragraph. Thus, it is not clear how this paragraph could disclose setting first and second thresholds as a function of the facilities and third and fourth thresholds as a function of the detected malfunction or type of repair. The word "thresholds" is also missing from paragraph 0138. So this paragraph could not possibly disclose the claimed subject matter. As for paragraph 0019, while it broadly talks about key performance indicators, there is no specificity as to what these indicators are. Thus, this paragraph could not be a disclosure of the claimed subject matter. Once again, the Examiner's reference to phantom prior art falls far short of what is needed to present a *prima facie* case of obviousness.

Once again, objectively, there is no explicit disclosure in Spira et al. of the ability to real time notify start and end time of maintenance tasks, allowing to automatically calculate specific parameters as the number of maintenance tasks carried out for each piece of

facilities during a period of time, the total duration of the maintenance tasks performed on each piece of facilities during a period of time, the elapsed time between a time when a piece of facilities is detected as malfunctioning and the start time of a repair task, and the elapsed time between the start time of the maintenance task and the return to a normal operational state, the objective being to automatically compare these parameters to predetermined parameters specified in the contract binding the maintenance company to the facilities management company.

For the foregoing reasons, it is believed that the invention of claims 13 and 15 - 19 would not be obvious to a person skilled in the art from a reading of Spira et al. and thus these claims involve an unobvious inventive step.

At a minimum, claims 20 and 21 are allowable for the same reasons as claim 13. The Petite patent does not cure the aforementioned deficiencies of Spira et al.

Petite is cited as showing a radio telephone network as a back-up link. The Examiner concludes that it would have been obvious to have incorporated Petite's back-up links into Spira et al. The problem with this modification is that Spira et al. lacks the claimed local monitoring units and the first and second computers. Further, Spira in paragraph 0022 only talks about the operation and control of the service being provided through regional facilities which are linked to the local facilities by a communication connection. This paragraph says nothing about transmissions between any local monitoring units and first and second computers. Thus, the Examiner misrepresents what is disclosed by Spira et al. Petite does not cure the deficiencies of Spira et al. because it

has nothing to do with a facilities management system. For these reasons, claim 20 is allowable.

Claim 21 is allowable because neither of the cited and applied references teaches or suggests a local monitoring unit comprising a data transmission unit having means for transmission over the basic telephone network as well as means for transmission over the radio telephone network. Further, neither reference has other local monitoring units comprising means for connection to the data transmission unit. None of paragraphs 0121, 0134, and 0143, in Applicants' opinion, discuss local monitoring units. The modules being discussed are service modules, not equipment.

At a minimum, claims 22 and 23 are allowable for the same reasons as their parent claims.

The Johnson patent is relied upon by the Examiner for its showing of a back-up power supply. In particular, the Examiner relies upon column 15, lines 47 - 53, of Johnson. A review of this section shows that it refers to a transducer control module which monitors the primary power source of the asset. If the power source fails, the control module includes an internal battery backup to transmit a power fail report to the monitoring system. It is submitted that claim 22 is allowable because there is nothing in Johnson which teaches or suggests providing the radio telephone network transmission mean in the data transmission unit with a back-ed up power supply for sending a power supply fault message when the local monitoring unit is no longer powered. Thus, there is no teaching or suggestion in any of the references of the claimed subject matter of claim 22.

With regard to claim 23, this claim is allowable because none of the cited and applied references teaches or

suggests a local monitoring unit comprising means for detecting internal faults pertaining to the operation of the local monitoring unit and means for sending malfunction information to a third computer. Nor is there any disclosure of a third computer being connected to the local monitoring units. The Examiner offers no reason why one of ordinary skill in the art would be motivated to add a third computer to Spira et al. and why one of ordinary skill in the art would be motivated to send malfunction information to a third computer. Applicant agrees that the ability for a maintenance company to monitor the local monitoring units provides a benefit. However, none of the cited and applied references suggest this. Even if they did, there is nothing in any of the cited and applied references which would lead one to send the malfunction information to a third computer which comprises a means for receiving and processing and storing into a database the internal malfunction information transmitted by the local monitoring units. Johnson does not teach monitoring any internal fault of the operation of a local monitoring unit.

At a minimum, claims 24 and 25 are allowable for the same reasons as their parent claims. Whynacht does not cure the aforementioned deficiencies of Spira et al.

Claim 24 is allowable because neither of the cited references, taken alone or in combination with each other, teaches or suggests all the means set forth in claim 24. In particular, the Whynacht reference does not teach or suggest any means for sending a malfunction message to first and second computers if the second timer has timed out without the corresponding fault having disappeared. To show this feature, the Examiner relies upon certain portions of Whynacht. A review of these portions however

show that they do refer to what the Examiner has called the first timer, not the second timer. Certainly, there is nothing in this portion which teaches sending the malfunction message to more than one computer.

Claim 25 is allowable because there is nothing in either of the cited and applied references which teaches or suggests determining the duration for each of the timers independently from each other as a function of malfunction type. While the timers in Whynacht may have different durations, the reference is silent as to how these durations are arrived at.

In support of the patentability of claim 13, Applicant submits the Gendraud declaration. In the declaration, Mr. Gendraud points out the following.

Spira et al. does not teach or suggest the subject matter of claim 13. The Examiner cites Spira et al. for the claim limitation: "each local monitoring unit comprising: means for measuring operation parameters of the associated piece of facilities for detecting an operational state thereof, control means for allowing a maintenance technician to real time notify the start and the end time of his maintenance or repair task performed on the associated piece of facilities; means for being connected to a transmission network; and means for transmitting through said transmission network said detected operational state of said associated piece of facilities and said maintenance task start and end time." However, Spira et al. does not teach or suggest such a limitation.

In Spira et al., at paragraph 0022, it is stated "[t]he modules, which are implemented through software modules and hardware, are installed at a local level in each plant. However, operation and control of the service

is provided through regional facilities that are linked to the local facilities by a communication connection, such as through the Internet."

In Spira et al., at paragraph 0354, it is stated "[i]ntegrated sensors are used in power generators to collect measurements continuously during operation so that preventive maintenance actions can be taken when necessary. Continuous monitoring of the conditions on-line or telemonitoring allows the plant to operate at maximum efficiency."

The Examiner considers the disclosure in Spira et al. about the software modules to be similar to the local monitoring units of the invention claimed in claim 13 of the '946 patent application. Further, the Examiner makes reference to integrated sensors which are used to collect measurements continuously during operation, as elements of such local monitoring units.

It does not appear that the Spira et al. disclosure teaches or suggests connecting these sensors to any local monitoring units which comprises in combination means for measuring operation parameters, means for being connected to a transmission network, means for transmitting information through the transmission network and control means for allowing a maintenance technician to real time notify the start and end time of his maintenance task.

Thus, it seems that the Examiner asserts that the local monitoring units of the invention would be nothing more than classical sensors, like the sensors effectively disclosed in Spira et al., which are classically used to collect measurements continuously during operation. In Appellants' opinion, the Examiner is reading the claimed local monitoring units very broadly and ignores the

fundamental and essential functionality of the monitoring units of the invention - namely, allowing a maintenance technician to real time notify the start and end time of his maintenance or repair task, and then allowing a facilities management company to automatically control maintenance of facilities by a maintenance company with regards to the maintenance contract. The foregoing is not an implicit or inherent functionality of Spira et al. Specifically, the Examiner states that there is an implied ability to track the start and end time of the work as well as the repair tasks performed during the maintenance by the technician. It is nowhere suggested or taught by Spira et al. that such an ability exists. Further, the Examiner has not shown that such an ability is inherently present in the system of Spira et al.

Even if one can presume that the maintenance services according to Spira et al. are effectively monitored to insure that the maintenance company respect their end of the contract, there is no disclosure in Spira et al. of any means indicating how the maintenance services are concretely monitored and thus how to automatically and real time follow the good execution of the contract binding the maintenance company to the facilities management company.

Since there is no disclosure of such means and since there is no recognition in Spira et al. of real time notification, there is nothing which would motivate, teach, or suggest to one of ordinary skill in the art to modify Spira et al. to provide such functionality.

Still further, the Spira et al. disclosure does not contain a description that would enable one of ordinary skill in the art to realize such a local monitoring unit having such a combination of elements.

For these reasons, Mr. Gendraud confirms that Spira et al. does not teach or suggest the invention set forth in claim 13.

Also attached hereto is a Declaration from Ms. Michele O'Toole. Ms. O'Toole's declaration points out significant differences between the system set forth in the claims of the instant application and the system disclosed in the Spira et al. publication. In Ms. O'Toole's opinion, the system of the present invention provides commercial advantages not present in the prior art system described by Spira et al. Ms. O'Toole's declaration is a secondary consideration which leads to the conclusion that the invention set forth in the claims is not obvious over Spira et al.

For the foregoing reasons, the instant application is believed to be in condition for allowance.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, the Examiner is hereby invited to contact Applicant's attorney at the telephone number listed below.

With regard to the declaration attached hereto, it should be noted that it could not have been earlier submitted, since the final rejection was made on first action.

A two month extension of time is hereby requested. Also enclosed is a notice of appeal in the event the Examiner maintains the rejections of record.

The Director is hereby authorized to charge the extension of time and notice of appeal fees in the amount of \$485.00 to Deposit Account No. 02-0184. Should the Director determine that an additional fee is due, he is



hereby authorized to charge said fee to said Deposit  
Account.

Respectfully submitted  
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